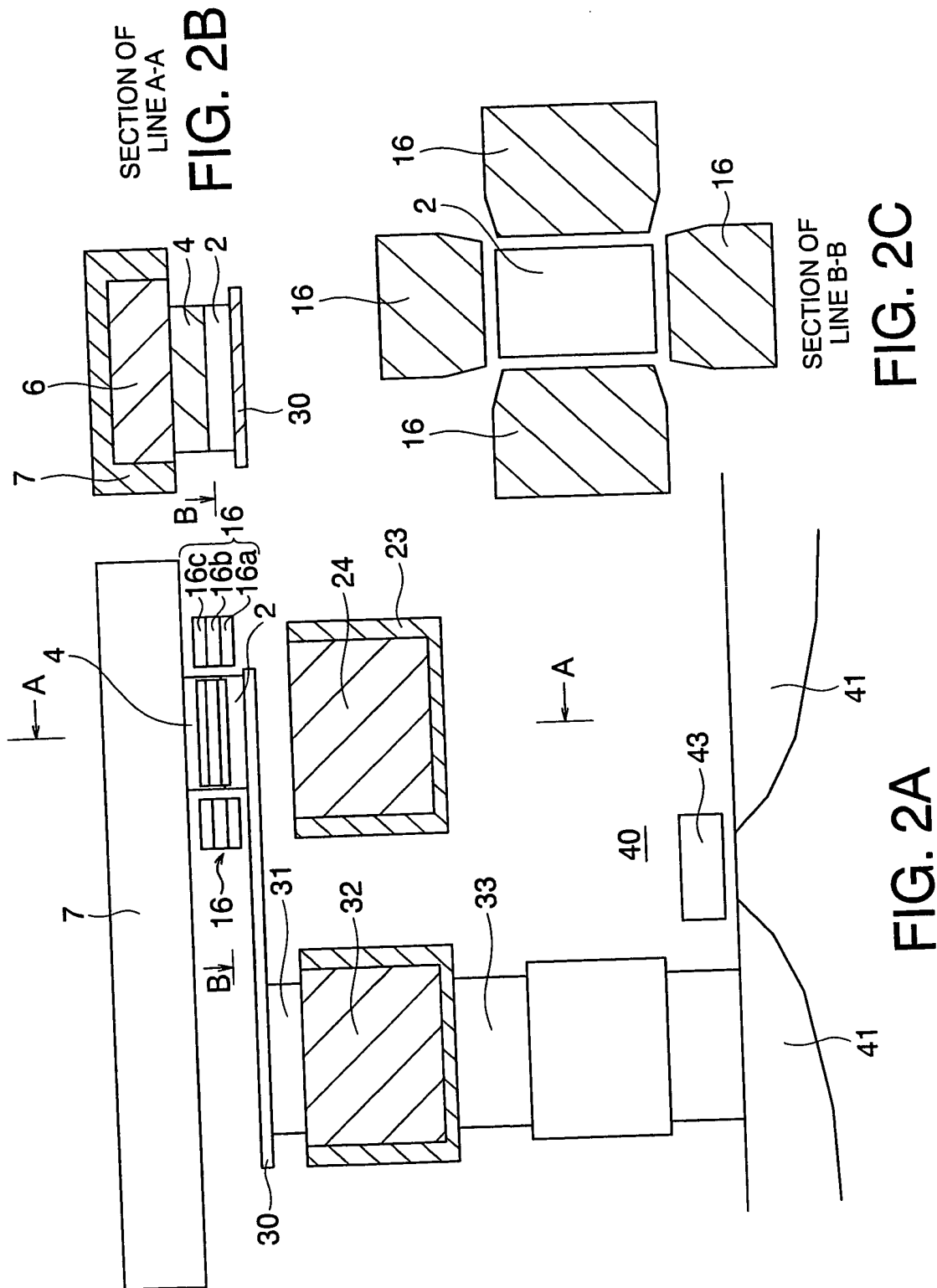


2/17



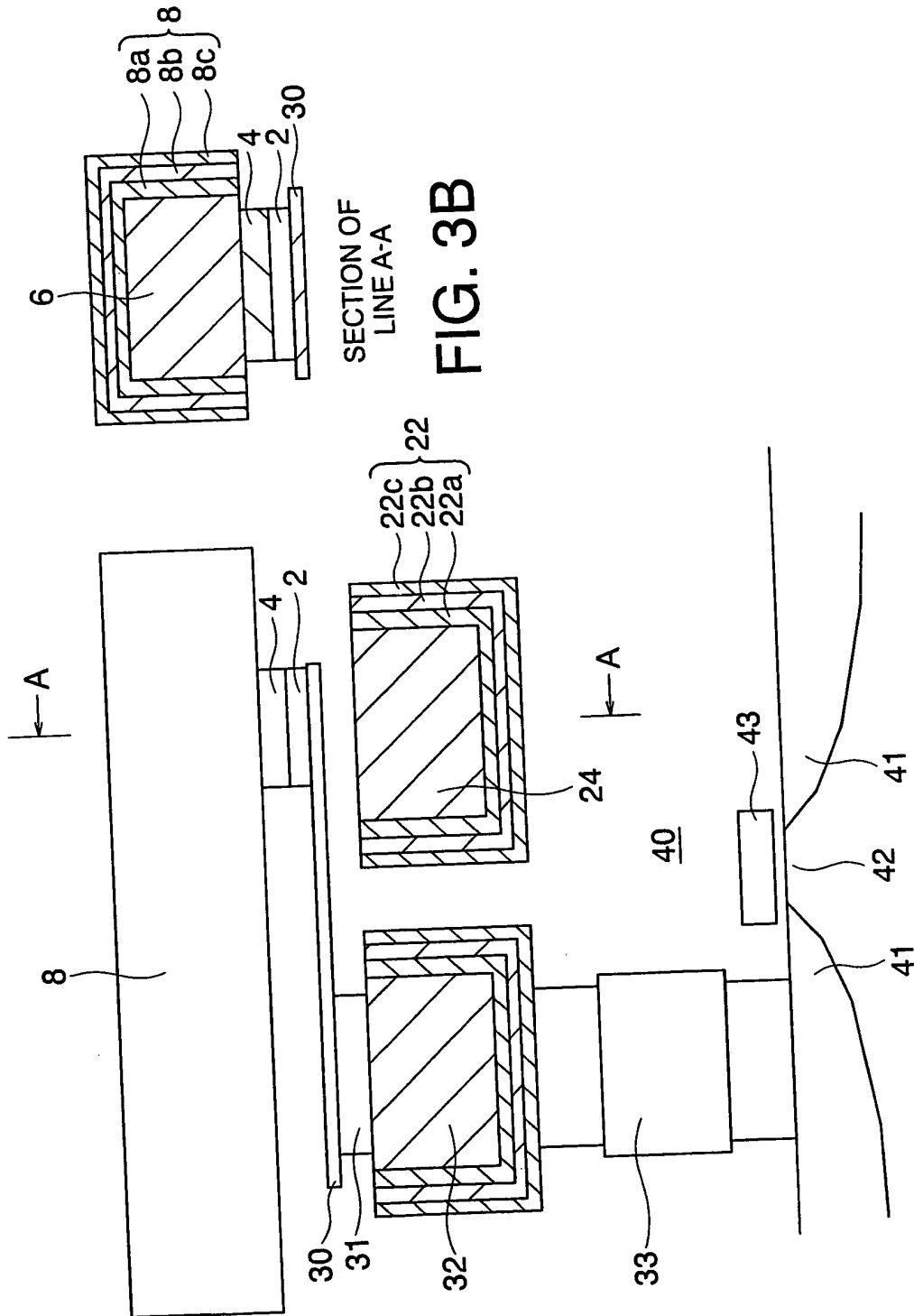


FIG. 3A

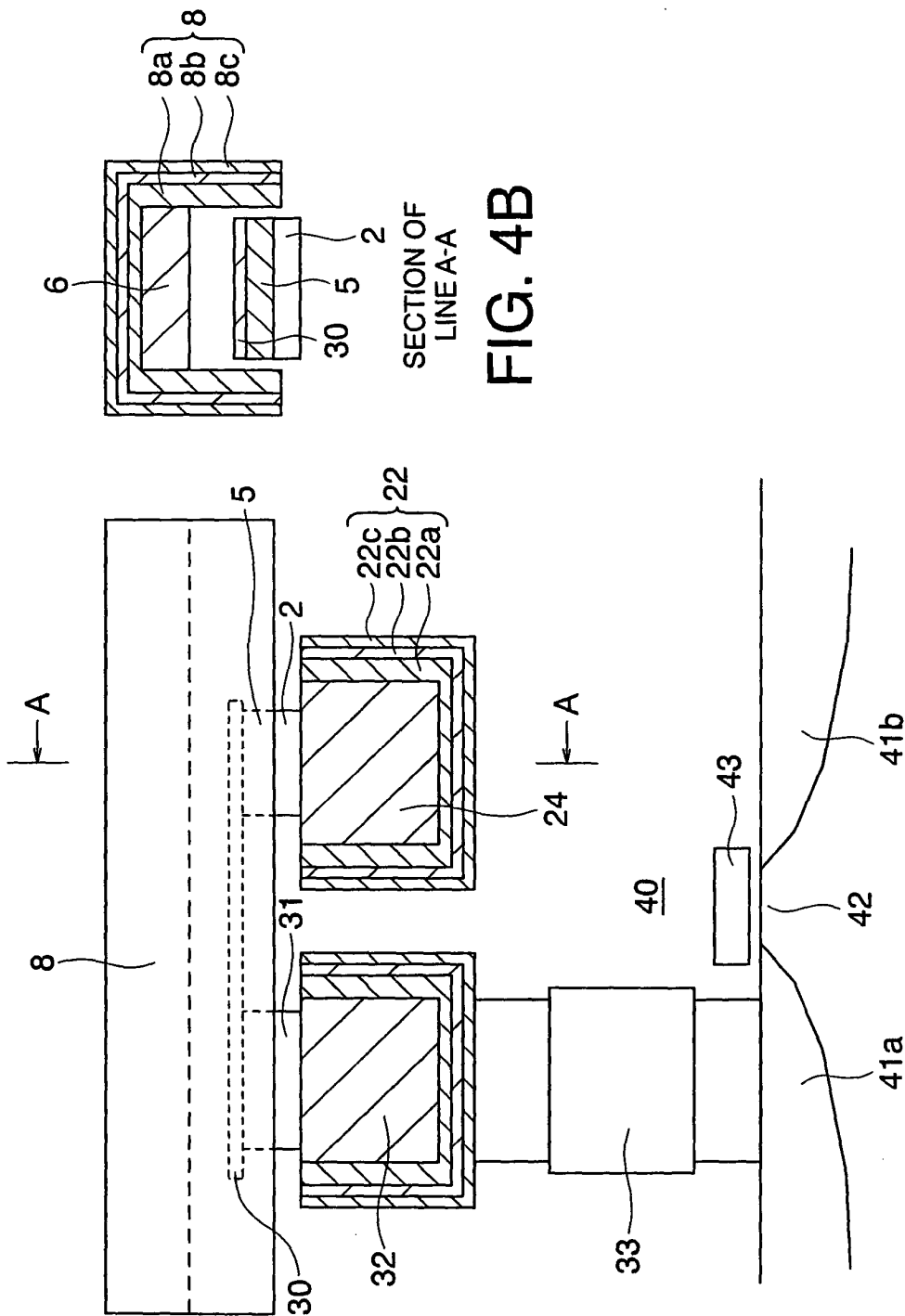


FIG. 4A

FIG. 4B

5/17

FIG. 5A

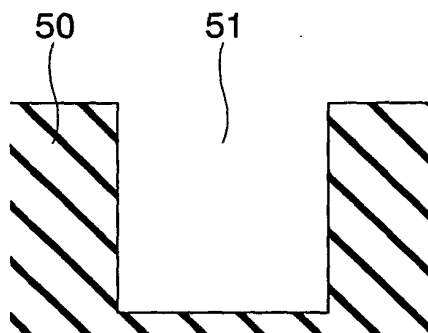


FIG. 5B

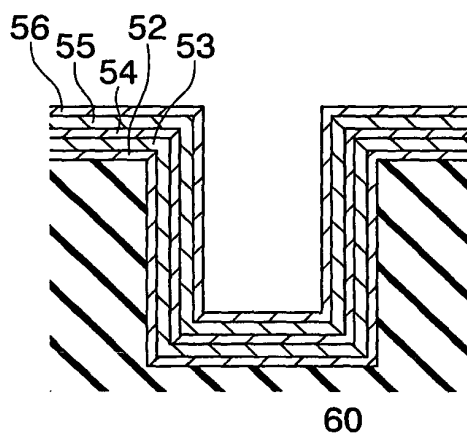


FIG. 5C

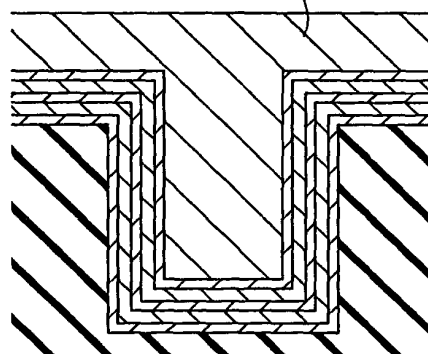
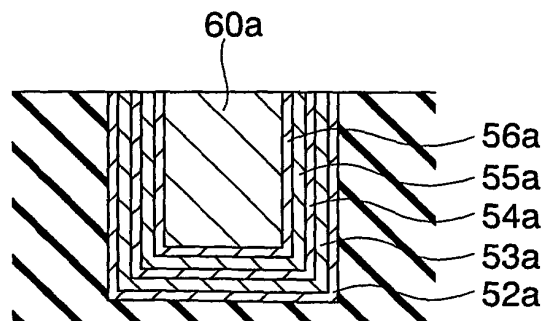


FIG. 5D



6/17

FIG. 6A

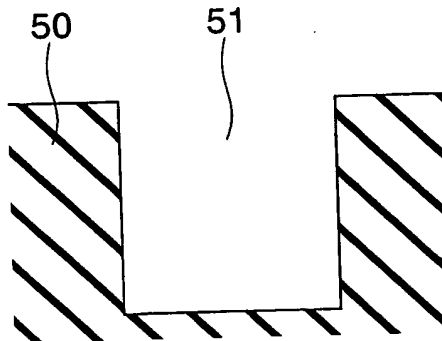


FIG. 6B

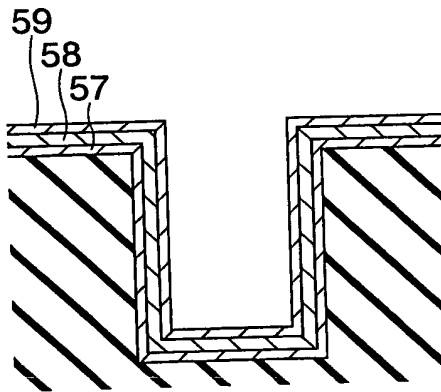


FIG. 6C

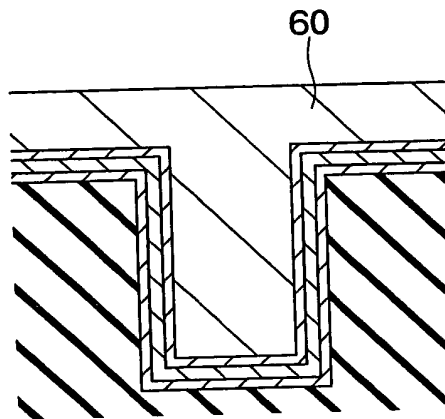
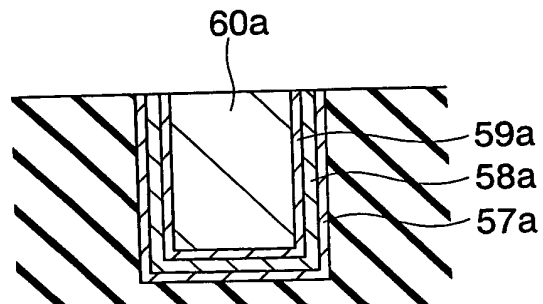


FIG. 6D



7/17

FLUCTUATIONS IN SWITCHING MAGNETIC FIELD dH_c
AND OFFSET MAGNETIC FIELD dH_{off}

	YOKE STRUCTURE	dH_c (Oe)	dH_{off} (Oe)
EXAMPLE 1	$Ni_{80}Fe_{20}/Ta/Ni_{80}Fe_{20}$	8.9	7.3
MODIFIED EXAMPLE	$CO_{70.5}Fe_{4.5}Si_{15}B_{10}/Ta/Ni_{80}Fe_{20}$	8.1	6.6
COMPARATIVE EXAMPLE 1	$Ni_{80}Fe_{20}$	19.4	20.3
COMPARATIVE EXAMPLE 2	$CO_{70.5}Fe_{4.5}Si_{15}B_{10}$	16.4	18.3

FIG. 7

8/17

FIG. 8A

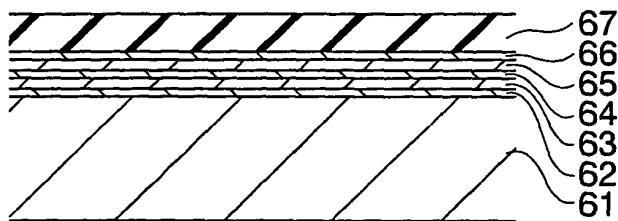


FIG. 8B

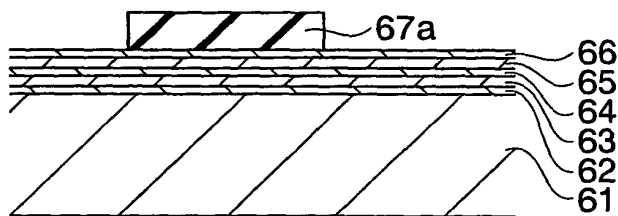


FIG. 8C

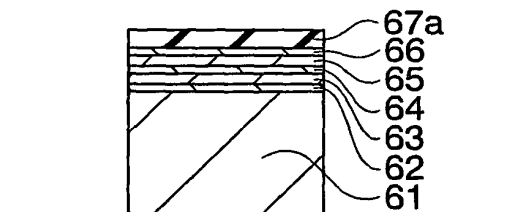


FIG. 8D

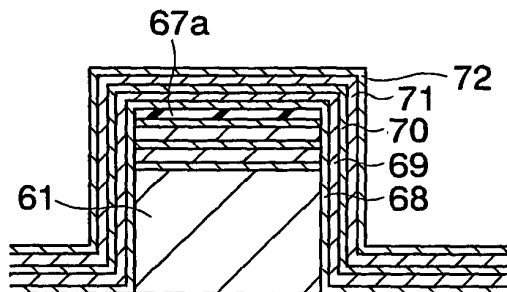
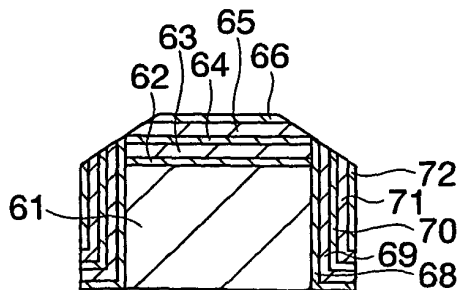


FIG. 8E



FLUCTUATIONS IN SWITCHING MAGNETIC FIELD dH_c
AND OFFSET MAGNETIC FIELD dH_{off}

	YOKE STRUCTURE	dH _c (Oe)	dH _{off} (Oe)
EXAMPLE 2	Ni ₈₁ Fe ₁₉ /Ta/Ni ₈₁ Fe ₁₉	8.2	7.8
MODIFIED EXAMPLE	Ni ₈₁ Fe ₁₉ /TaN/CO ₈₇ Nb ₅ Zr ₈	7.8	8.1
COMPARATIVE EXAMPLE 1	Ni ₈₁ Fe ₁₉	17.6	18.3
COMPARATIVE EXAMPLE 2	CO ₈₇ Nb ₅ Zr ₈	17.7	19.1

FIG. 9

10/17

FIG. 10A

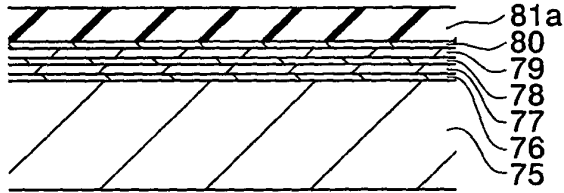


FIG. 10E

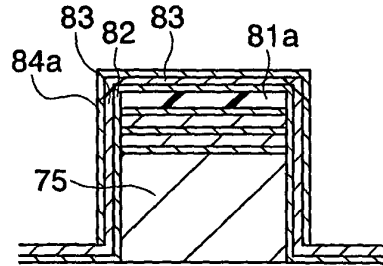


FIG. 10B

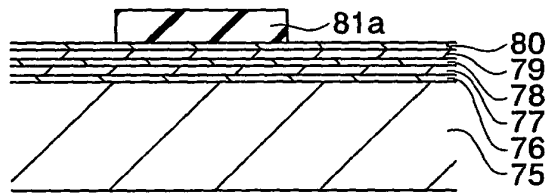


FIG. 10F

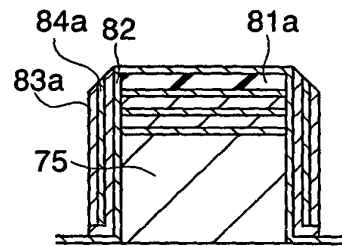


FIG. 10C

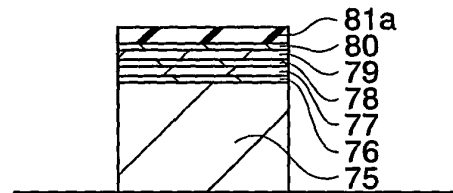


FIG. 10G

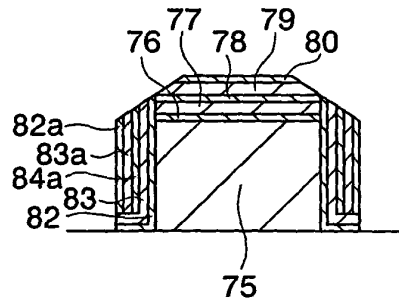
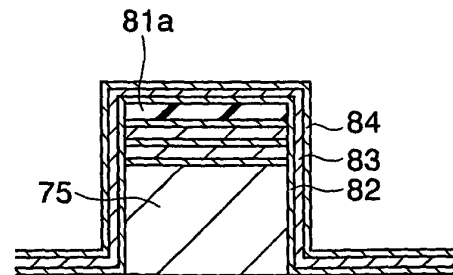


FIG. 10D



11/17

FLUCTUATIONS IN SWITCHING MAGNETIC FIELD dH_c
AND OFFSET MAGNETIC FIELD dH_{off}

	YOKE STRUCTURE	dH_c (Oe)	dH_{off} (Oe)
EXAMPLE 3	$Ni_{81}Fe_{19}/Ta/Ni_{81}Fe_{19}$	9.4	8.1
MODIFIED EXAMPLE	$Ni_{81}Fe_{19}/Ta/Fe_{90}Cu_1Zr_7B_2$	7.7	9.1
COMPARATIVE EXAMPLE 1	$Ni_{81}Fe_{19}$	18.1	17.9
COMPARATIVE EXAMPLE 2	$Fe_{90}Cu_1Zr_7B_2$	13.2	15.9

FIG. 11

12/17

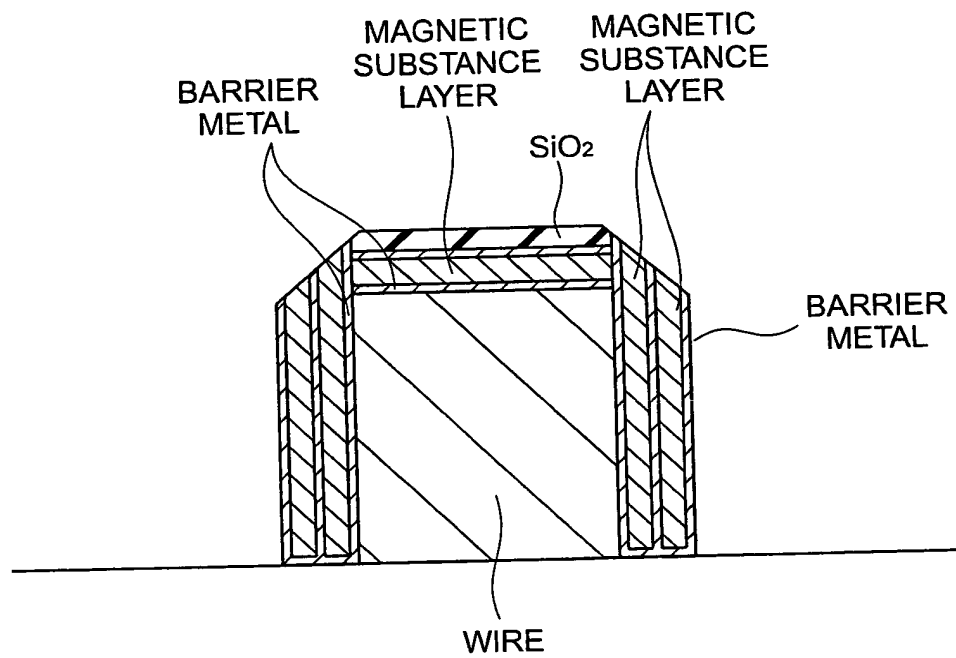
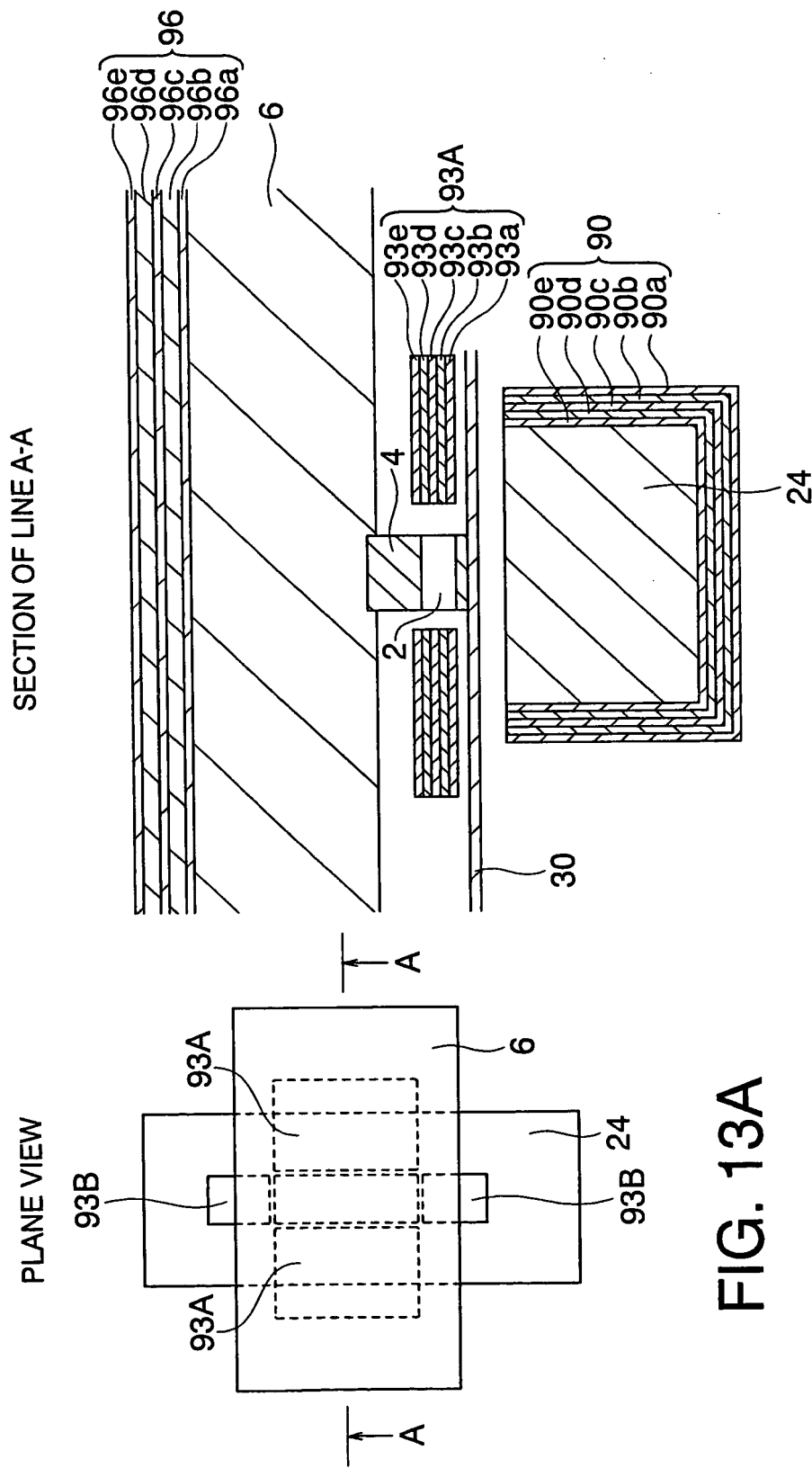


FIG. 12



FLUCTUATIONS IN SWITCHING MAGNETIC FIELD dH_c
AND OFFSET MAGNETIC FIELD dH_{off}

	YOKE STRUCTURE	dH _c (Oe)	dH _{off} (Oe)
EXAMPLE 4	Ni ₈₁ Fe ₁₉ /Ta/Ni ₈₁ Fe ₁₉	8.2	7.8
MODIFIED EXAMPLE	Ni ₈₁ Fe ₁₉ /TaN/Co ₈₇ Nb ₅ Zr ₈	8.5	7.4
COMPARATIVE EXAMPLE 1	Ni ₈₁ Fe ₁₉	17.8	16.3
COMPARATIVE EXAMPLE 2	Co ₈₇ Nb ₅ Zr ₈	15.4	18.3

FIG. 14

15/17

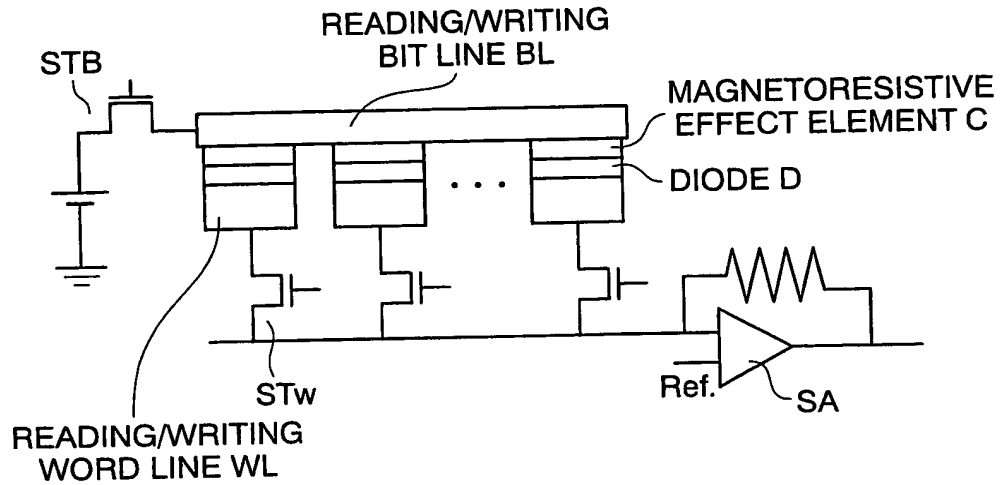


FIG. 15

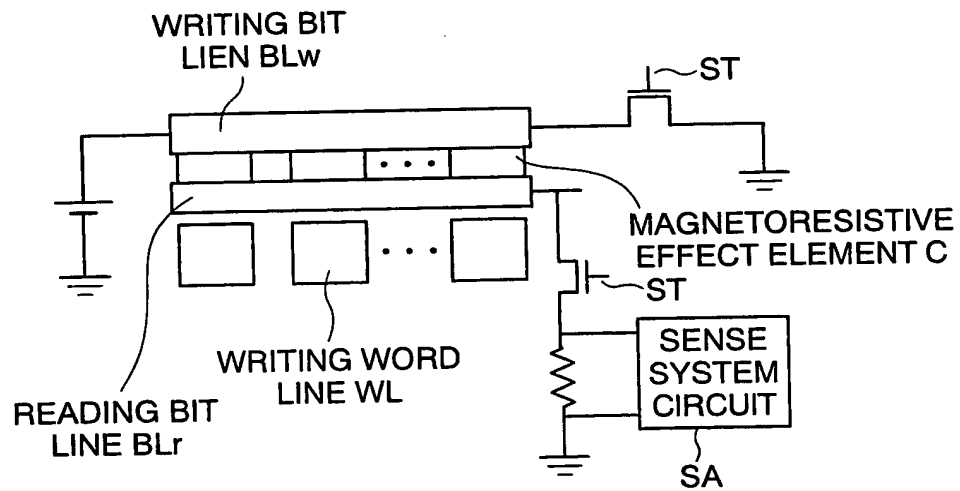


FIG. 16

16/17

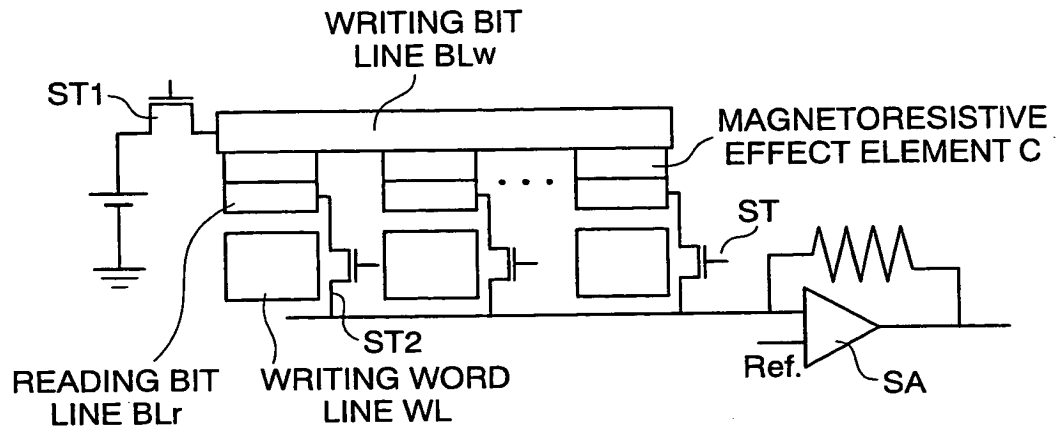


FIG. 17

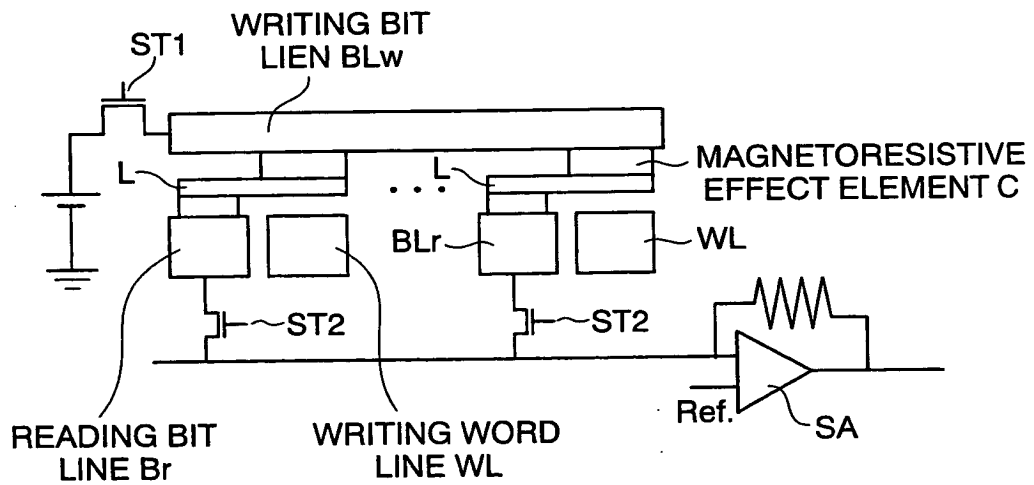


FIG. 18

17/17

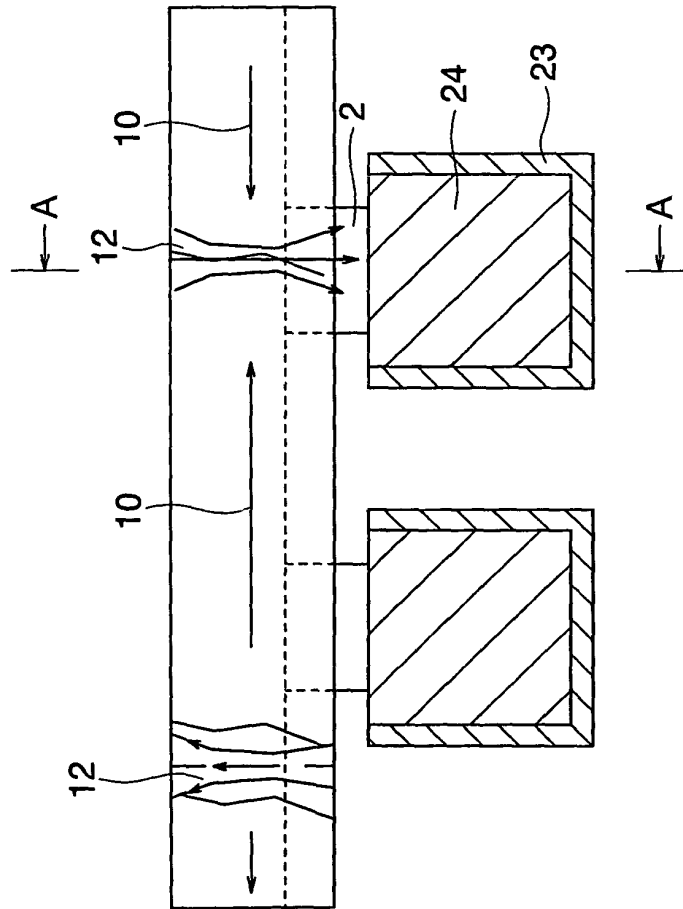


FIG. 19A

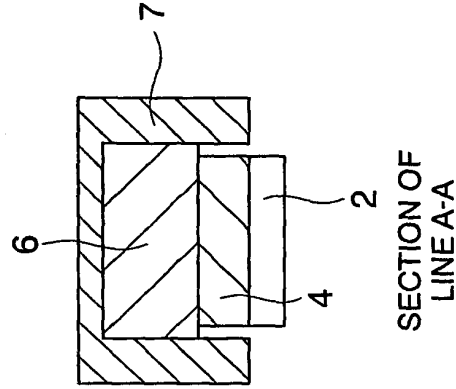


FIG. 19B